

Amendments to the Claims

Claim 1. (Currently Amended) A method for identifying a candidate modulatory compound for ameliorating or delaying an impaired glucose tolerance condition, atherosclerosis, or obesity decreasing the expression or activity of a *daf-16* gene, said method comprising:

- (a) providing a *C. elegans* or isolated *C. elegans* cell expressing a *daf-16* gene that encodes a polypeptide having at least 85% homology to SEQ ID NO:54 and that functions in insulin signaling; and
- (b) contacting said *C. elegans* or isolated *C. elegans* cell with a candidate compound, wherein a decrease in *daf-16* expression or activity of said gene following contact of said *C. elegans*, or said isolated *C. elegans* cell with said candidate compound identifies a candidate modulatory compound for ameliorating or delaying an impaired glucose tolerance condition, atherosclerosis, or obesity.

Claims 2 and 3. (Cancelled)

Claim 4. (Currently Amended) The method of claim 1, wherein said *daf-16* gene is a nematode *daf-16* gene.

Claims 5-11 (Cancelled)

Claim 12. (Currently Amended) The method of claim 1, wherein said *daf-16* gene has at least 71% 90% amino acid sequence identity to SEQ ID NO:54.

Claim 13. (Currently Amended) The method of claim 1, wherein said *daf-16* gene is a human gene.

Claims 14 and 15. (Cancelled)

16. (New) The method of claim 1, wherein said gene has at least 95%-amino acid sequence identity to SEQ ID NO:54.

17. (New) A method for identifying a candidate modulatory compound for ameliorating or delaying an impaired glucose tolerance condition, atherosclerosis, or obesity, said method comprising:

(a) providing a *C. elegans* or isolated *C. elegans* cell expressing a gene that hybridizes under stringent conditions to SEQ ID NO:54 and that functions in insulin signaling;

(b) contacting said *C. elegans* or isolated *C. elegans* cell with a candidate compound, wherein a decrease in expression or activity of said gene following contact of

said *C. elegans* or said isolated *C. elegans* cell with said candidate compound identifies a candidate modulatory compound for ameliorating or delaying an impaired glucose tolerance condition, atherosclerosis, or obesity.

18. (New) The method of claim 17, wherein said gene is a human gene.

19. (New) The method of claim 18, wherein said human gene is AFX

20. (New) The method of claim 18, wherein said human gene is FKHR.